

PRELIMINARY AMENDMENT

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A high flux X-ray source comprises:

a sealed X-ray tube;

an optic housing containing a multi-layer optic for collecting and focussing X-rays generated in the sealed X-ray tube, wherein the multi-layer optic is located at a predetermined distance from the sealed X-ray tube and the optic housing is adjustable relative to the sealed X-ray tube; and,

an X-ray beam conditioner, the beam conditioner being adjustable relative to the optic housing.
2. (original): An X-ray source according to claim 1, wherein the multi-layer optic is a confocal mirror.
3. (original): An X-ray source according to claim 1, wherein the multi-layer optic is a sagittal mirror.
4. (currently amended): An X-ray source according to claim 1, ~~any of claims 1 to 3~~, wherein the optic housing is adjustable relative to the sealed X-ray tube by independent rotation in each of a first pair of substantially orthogonal directions.

PATENT APPLICATION

PRELIMINARY AMENDMENT

5. (currently amended): An X-ray source according to claim 1, ~~claims 1 to 4~~, wherein the optic housing is adjustable relative to the sealed X-ray tube by independent translation in each of a second pair of substantially orthogonal directions.

6. (currently amended): An X-ray source according to ~~any preceding claim 1~~, further comprising a shutter housing adapted to receive a portion of the optic housing.

7. (currently amended): An X-ray source according to ~~any preceding claim 1~~, wherein the optic housing is filled with an inert gas.

8. (original): An X-ray source according to claim 7, wherein the inert gas is helium.

9. (currently amended): An X-ray source according to ~~any preceding claim 1~~, further comprising a moveable X-ray beam stop.

10. (currently amended): X-ray irradiation apparatus comprising an X-ray source according to ~~any preceding claim 1~~, and means for holding a sample in the path of the focussing X-rays.